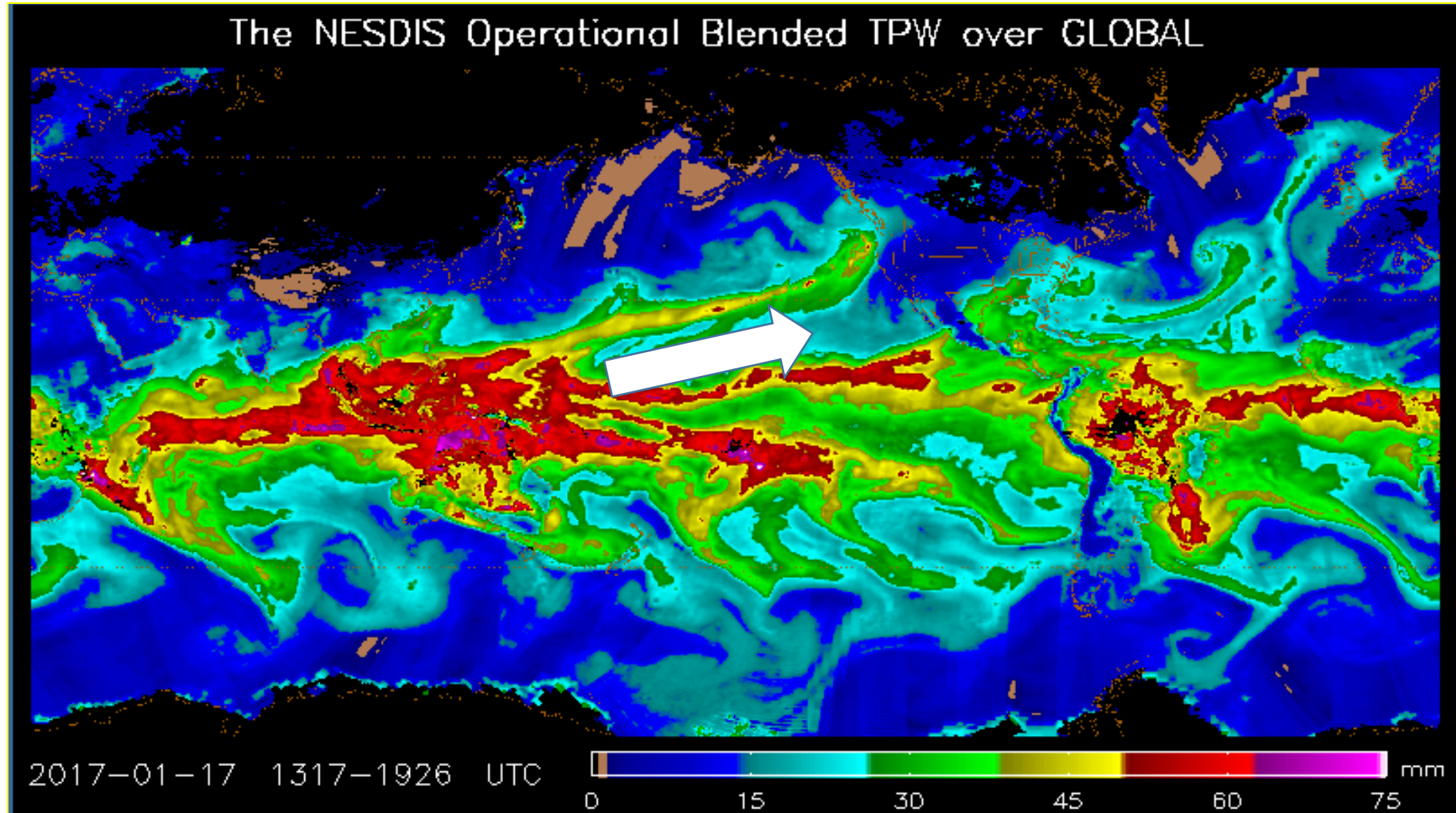


Pacific River

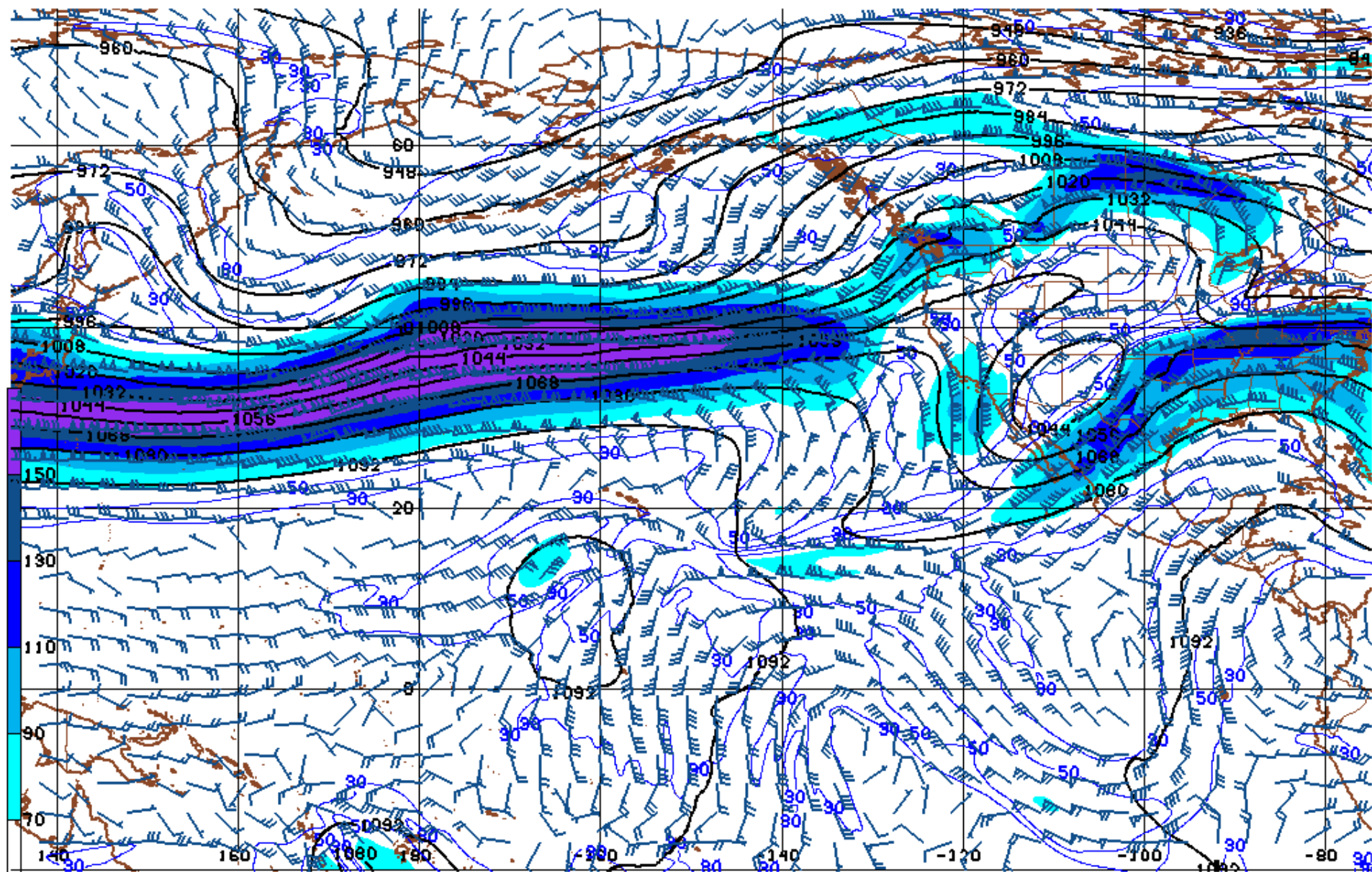
19 UTC 17 January 2017





250 mb jet 00 UTC 18 January 2017

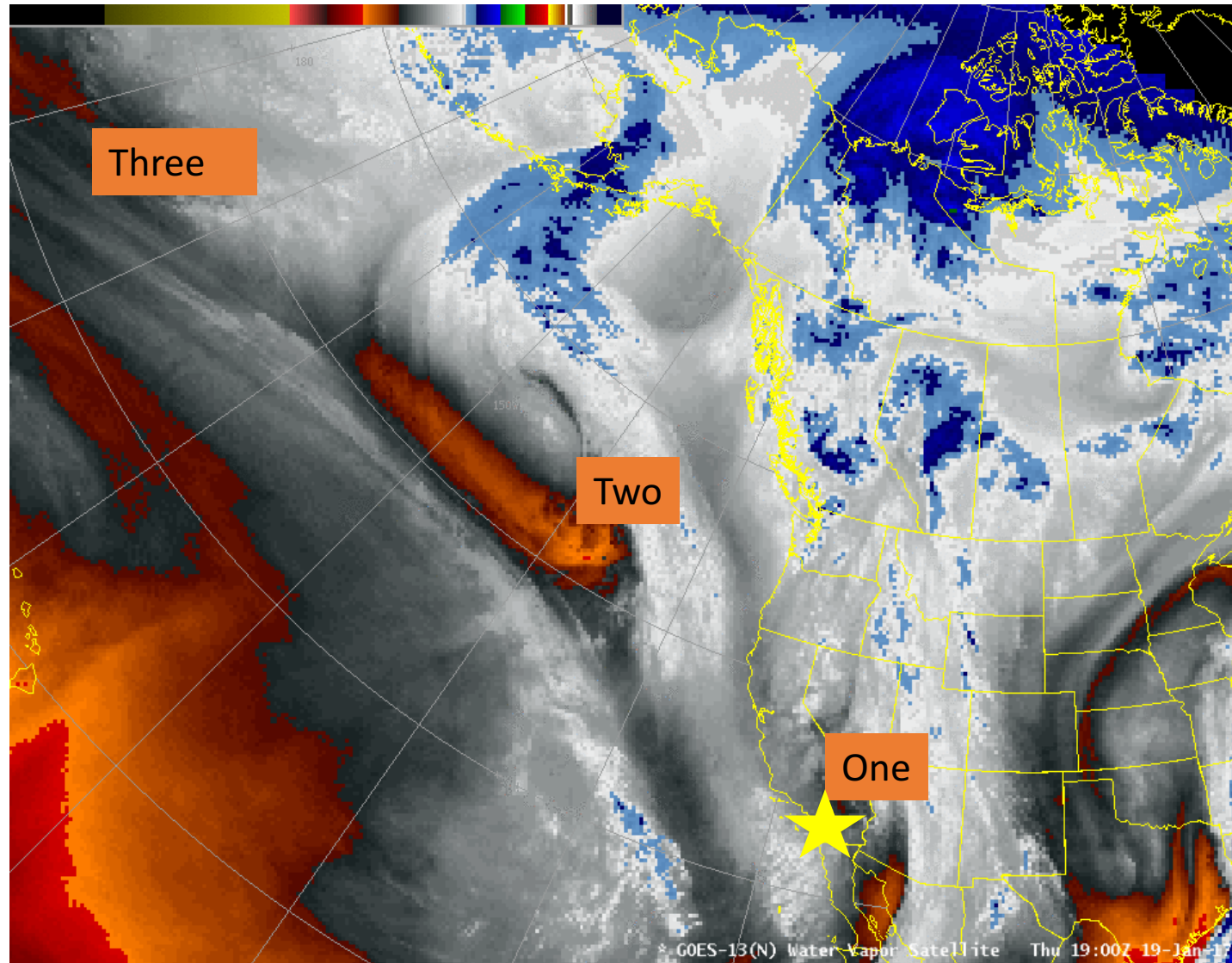
01/18/17 00UTC 000HR FCST VALID WED 01/18/17 00UTC NCEP/NWS/NOAA



170118/0000V000 GFS 250MB HEIGHTS, ISOTACHS, AND WIND (KTS)

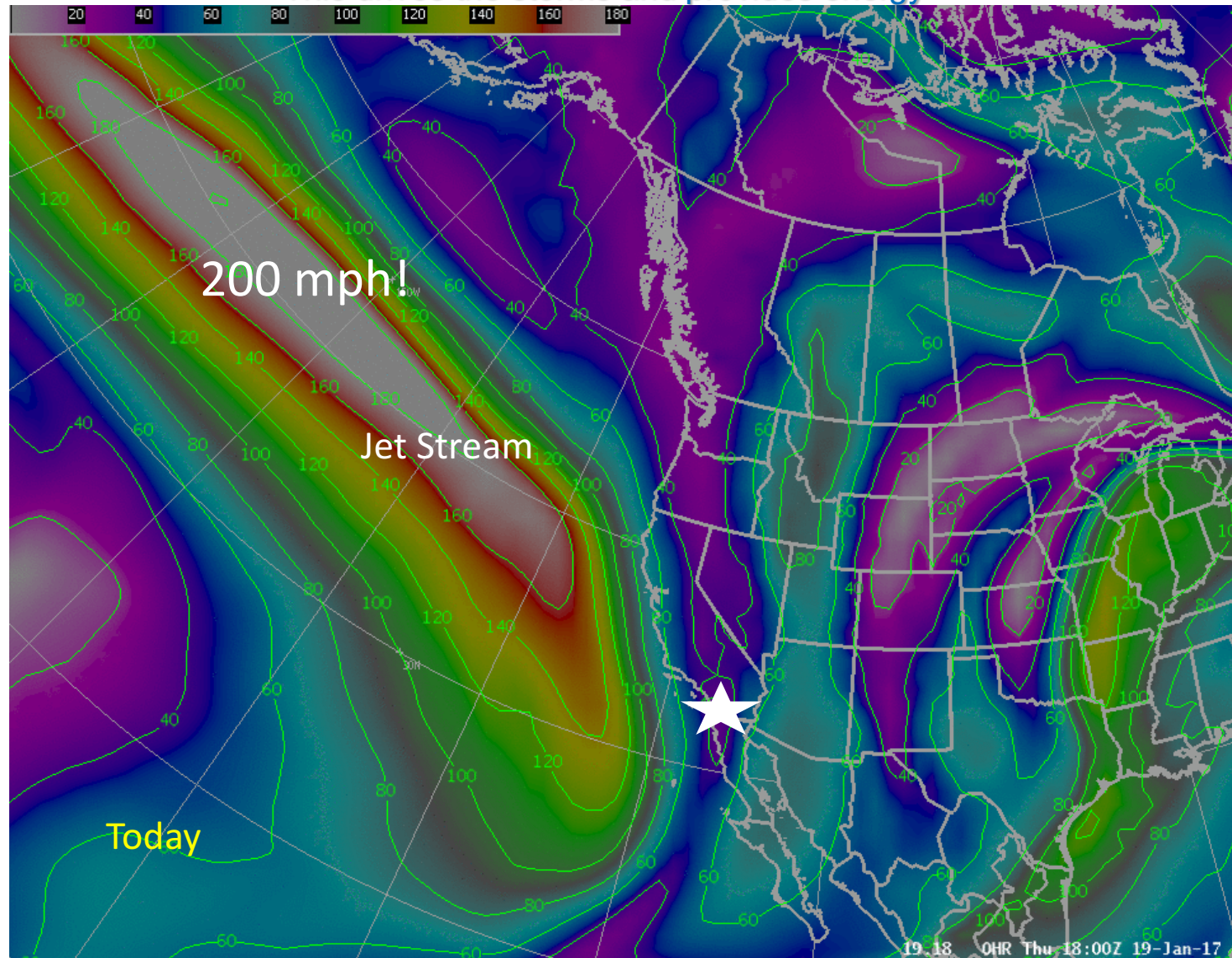
Water Vapor Satellite

18 UTC 19 January 2017



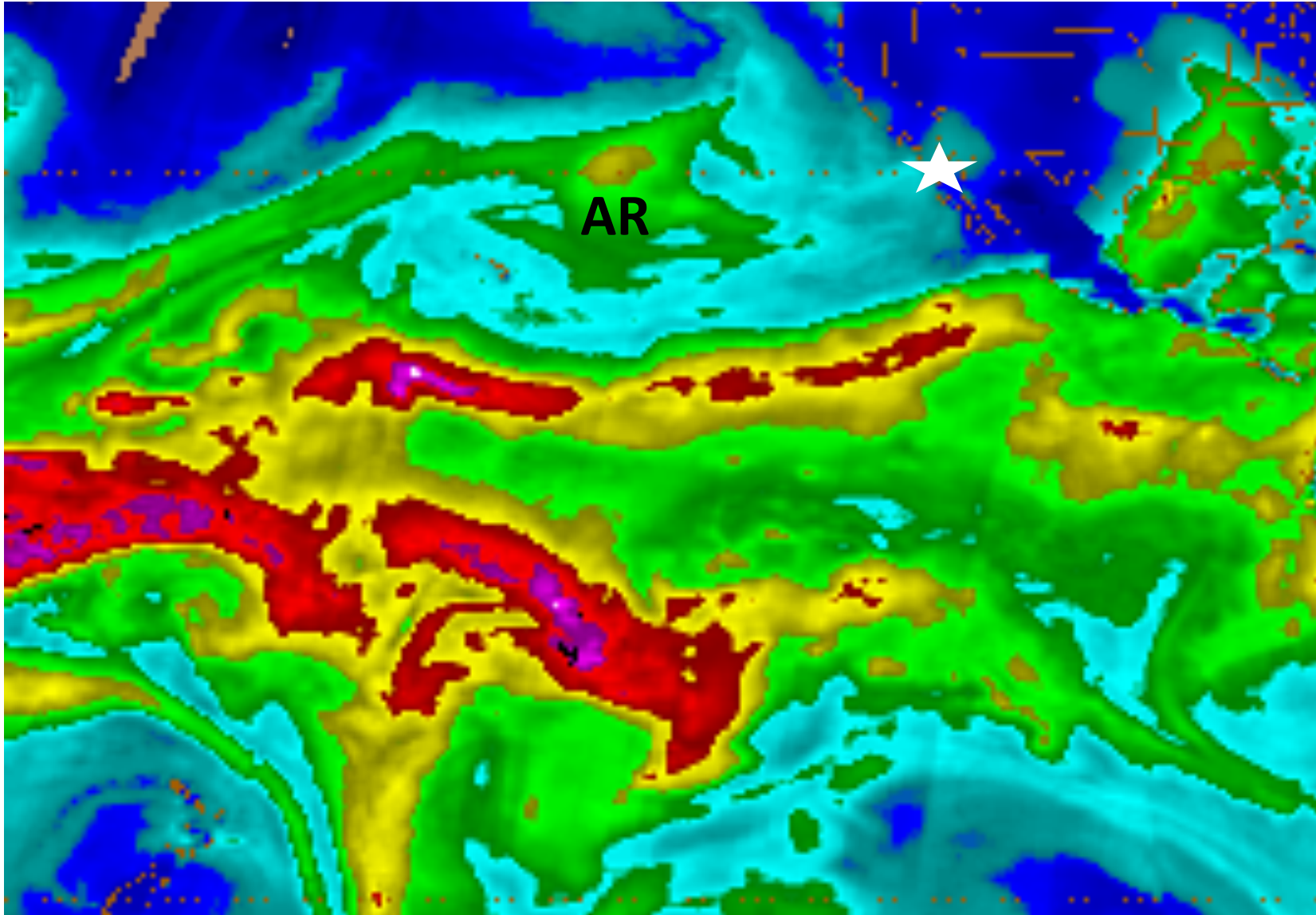
Usually Strong Elongated Jet at 18 UTC 19 January

This drives the storms and provides energy



Its an atmospheric river

21 UTC January 19, 2017



Wet Fact

Wet weather fact.

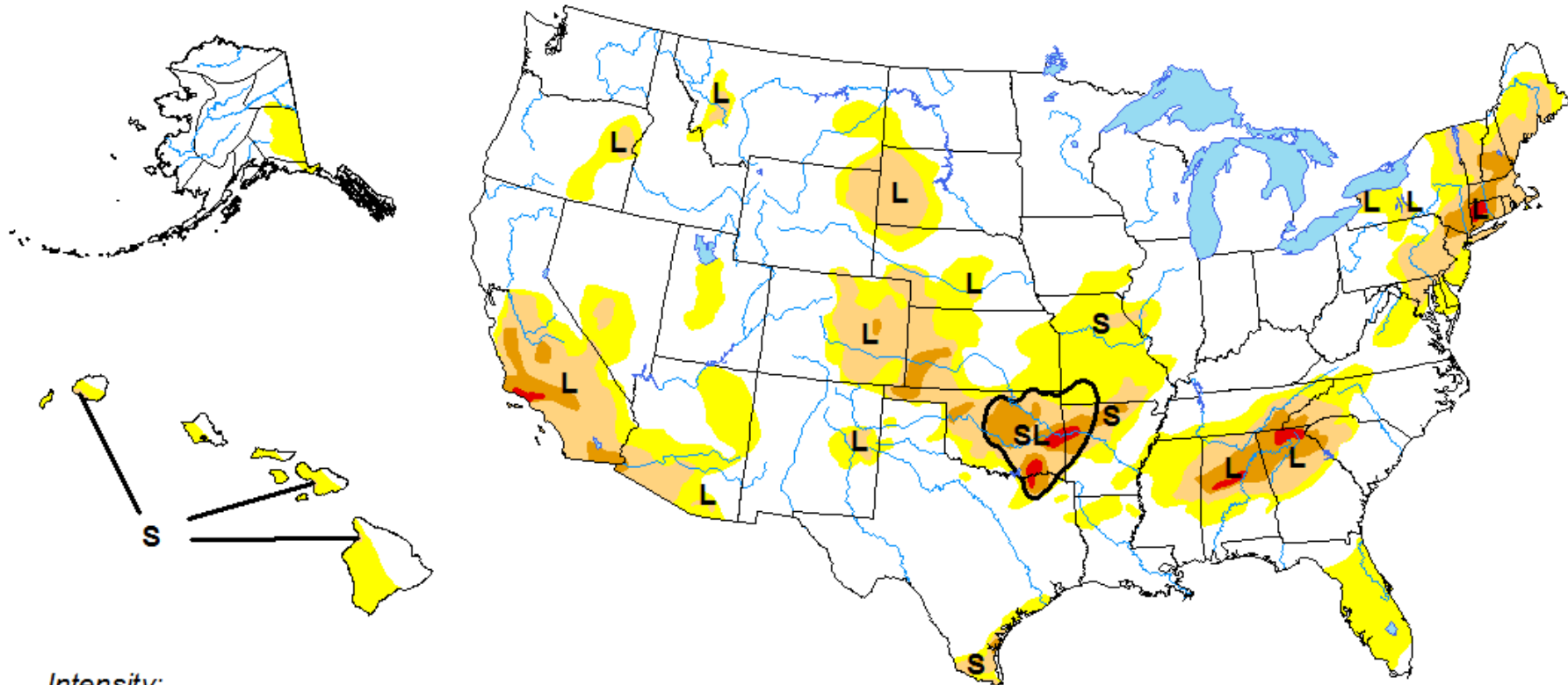
Santa Ana Orange County has more rain for January 2017, at **5.74** inches, than all 2013-14 season, which had 3.52 inches for the water year and the 2016-17 water season is 15.25 inches (since October) which is 115 percent of normal 13!

Last year (2015-16) on January 25 Santa Ana had 3.16 inches for the water year since October 1, 2015. 4 times more for the same time now in 2017!

U.S. Drought Monitor

February 7, 2017

Valid 7 a.m. EST



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Drought Impact Types:

- Delineates dominant impacts
- S = Short-Term, typically <6 months
(e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months
(e.g. hydrology, ecology)

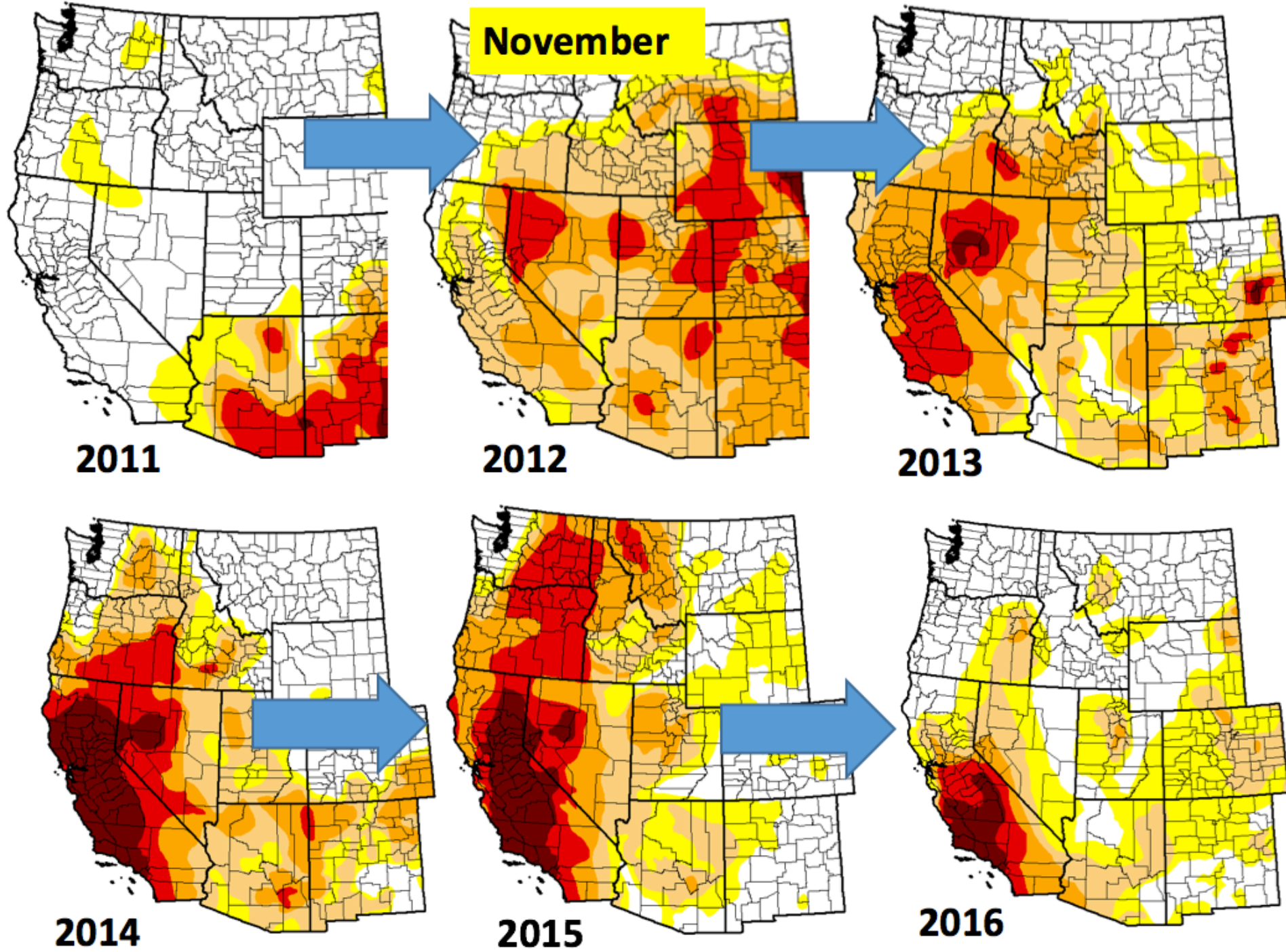
*The Drought Monitor focuses on broad-scale conditions.
Local conditions may vary. See accompanying text summary
for forecast statements.*

<http://droughtmonitor.unl.edu/>



Released Thursday, February 9, 2017

Author: David Simeral, Western Regional Climate Center

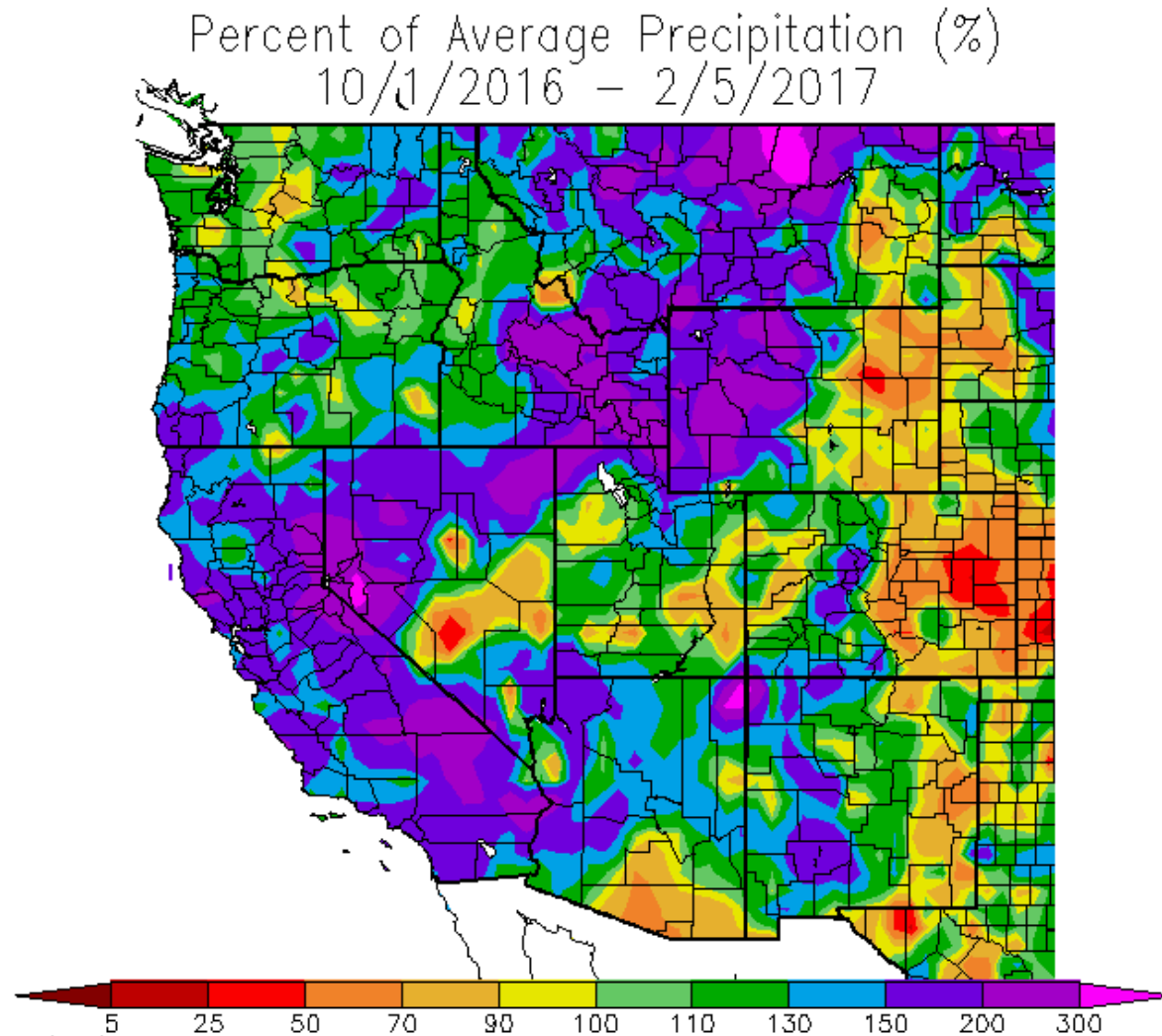


6 year precipitation since January 2011

February 7, 2017

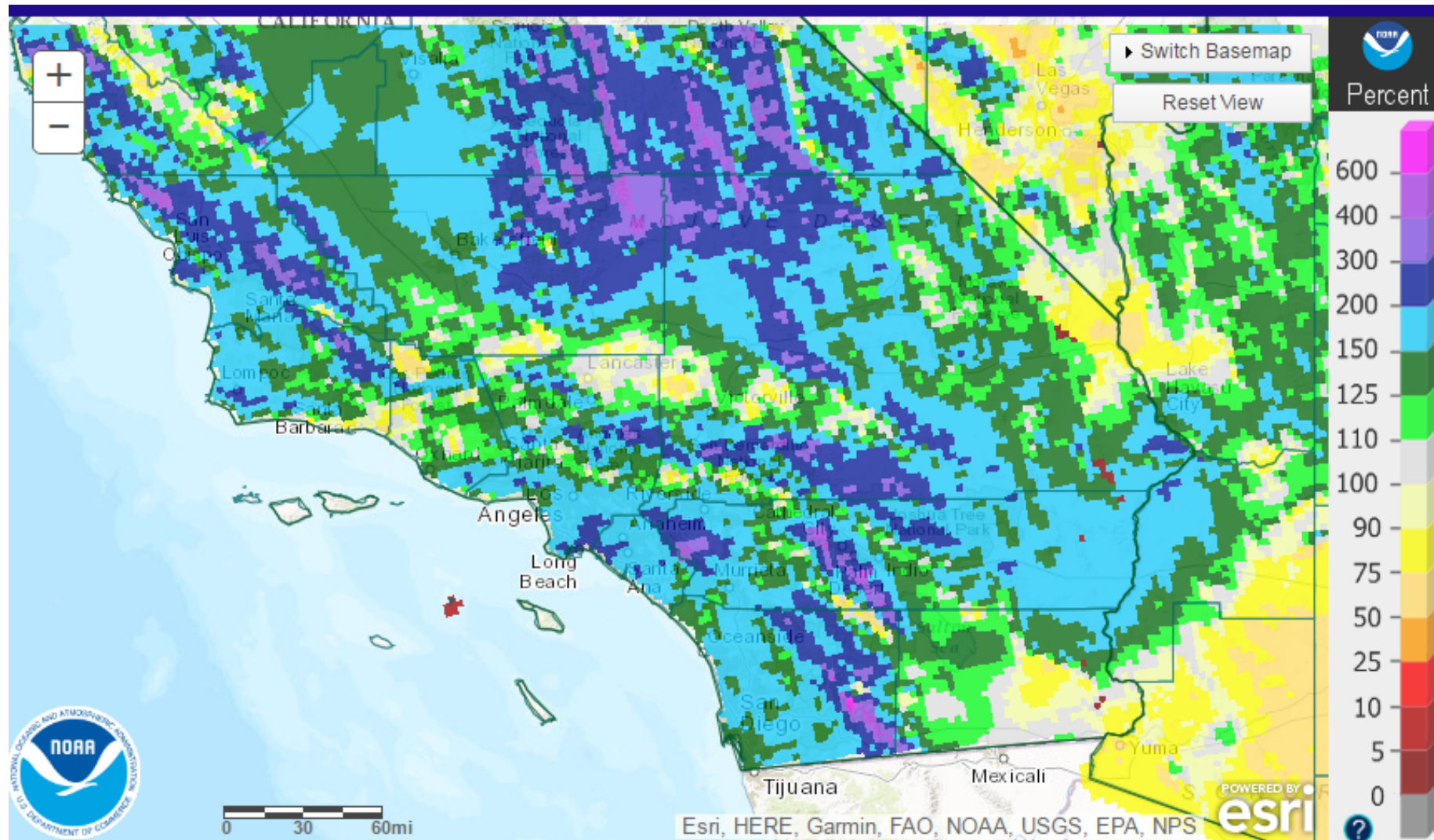
Station 5 year precipitation	Total Deficit Calendar Year	2015-16 % Annual	Current water year Since Oct 1	30-y Annual average	Lost precipitation
San Diego (SAN)		* Percent total water year average			
52.32	13.51 inches	8.18 or 79%	8.04 or 78% *	10.34	1 ½ season
Santa Ana (Fire stn)					
52.71	34.90 inches	5.19 or 38%	15.25 or 112%	13.63	2 ½ seasons
Riverside (Fire stn)					
47.84	14.02 inches	5.59 or 54%	11.26 or 109%	10.33	1 ½ seasons
Palomar Mtn					
144.36	47.46 inches	18.59 or 62%	28.54 or 95%	30.20	1 ½ seasons
Palm Springs					
20.85	9.84 inches	3.69 or 76%	5.32 or 110%	4.83	2 seasons

Percent of Normal Precipitation Since October 1



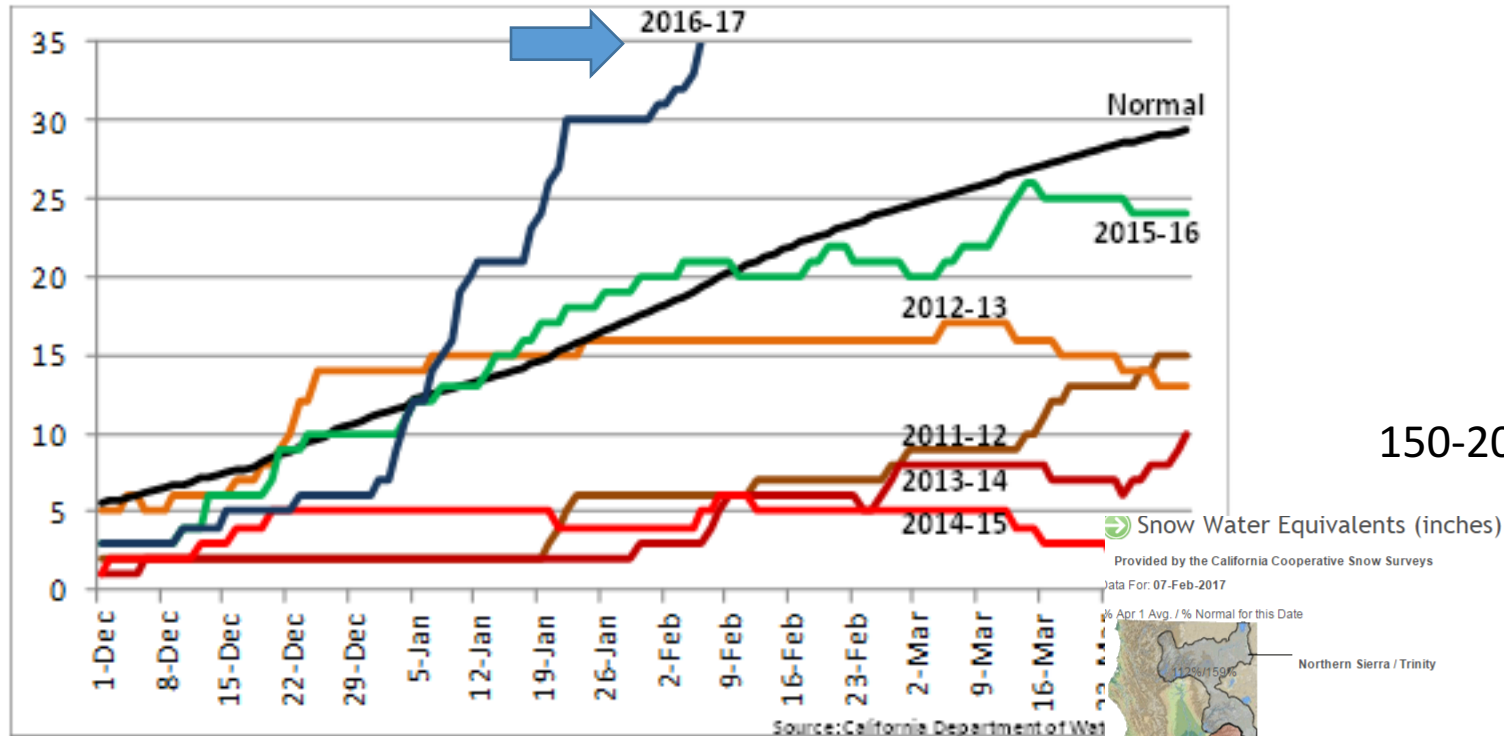
Generated 2/06/2017 at WRCC using provisional data.
NOAA Regional Climate Centers

Percent of Normal Precipitation Since October 1

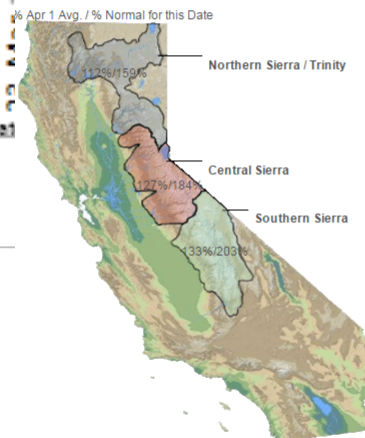


Snowpack in Sierra Nevada

Daily Sierra Nevada Snowpack (Inches) vs. Normal



150-200 percent normal



NORTH	
Data For: 07-Feb-2017	
Number of Stations Reporting	30
Average snow water equivalent	31.1"
Percent of April 1 Average	112%
Percent of normal for this date	159%

CENTRAL	
Data For: 07-Feb-2017	
Number of Stations Reporting	42
Average snow water equivalent	37.1"
Percent of April 1 Average	127%
Percent of normal for this date	184%

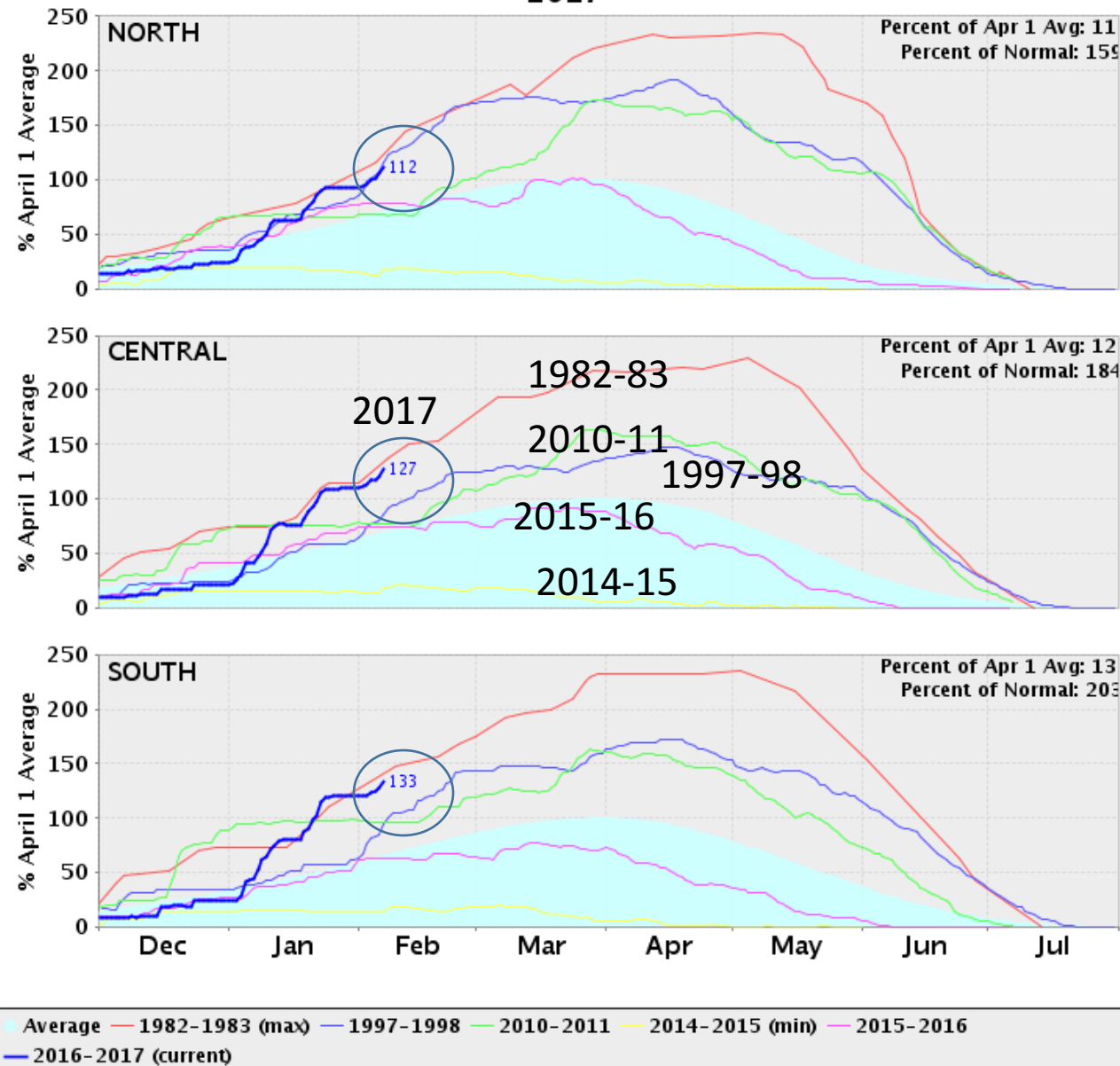
SOUTH	
Data For: 07-Feb-2017	
Number of Stations Reporting	29
Average snow water equivalent	35.9"
Percent of April 1 Average	133%
Percent of normal for this date	203%

STATEWIDE SUMMARY	
Data For: 07-Feb-2017	
Number of Stations Reporting	101
Average snow water equivalent	35.0"
Percent of April 1 Average	124%
Percent of normal for this date	182%

Change Date :

Near record snowpack

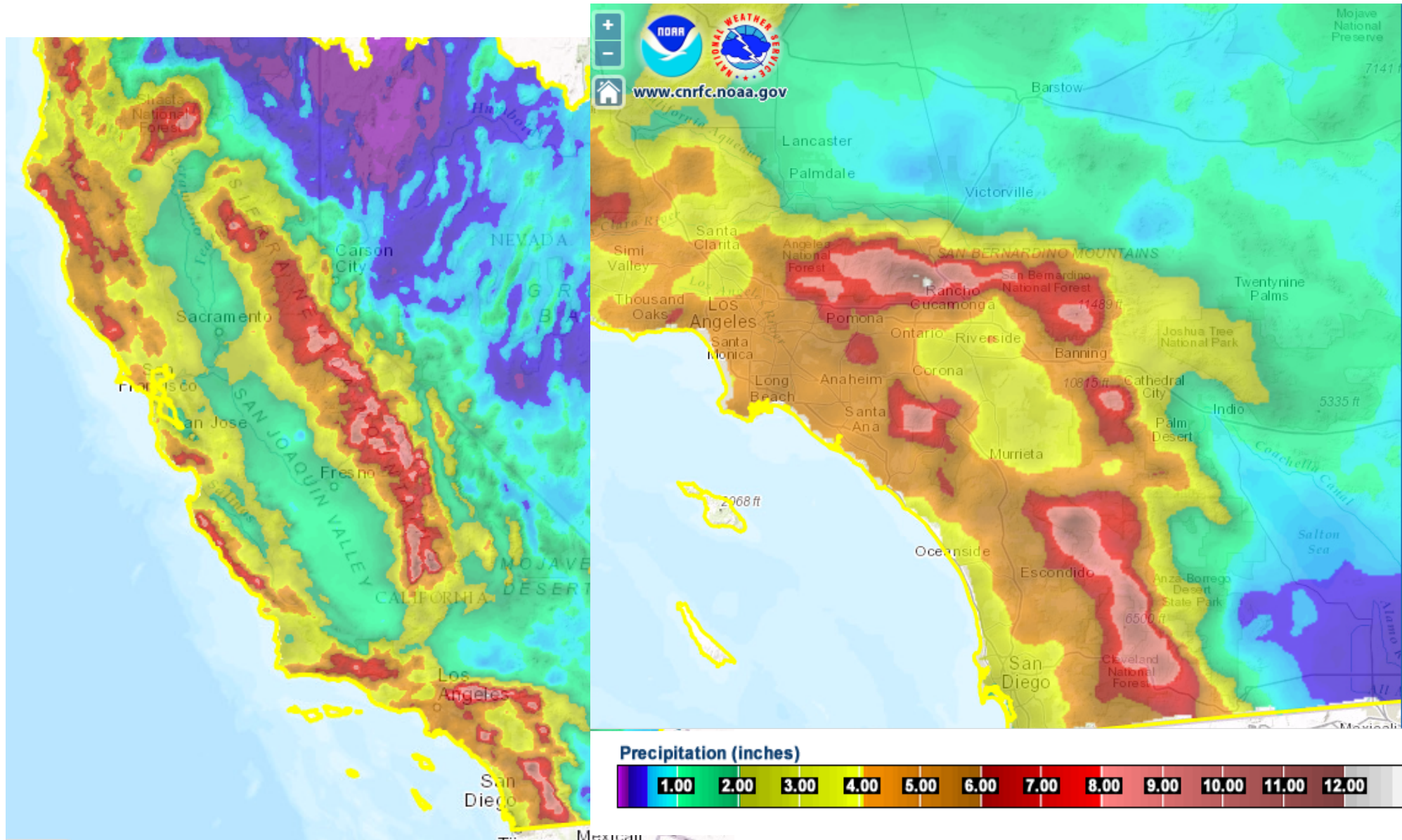
California Snow Water Content - Percent of April 1 Average For: 07-Feb-2017



High Wind and Heavy Precipitation with Flooding January 19-23, 2017



January 18 to 24, 2017 precipitation mapped



Top Snow Reports

Location	Snowfall	Elevation
San Jacinto Tram	73	8400
Big Bear Snow Summit	70 (108 January record)	7500
Green Valley Lake	59	6900
Mt Baldy end of road	54	6400
Big Bear	51	6800
Arrowbear	47	6200
Running Springs	47	6200
Barton Flats	36	6900
Forest Falls Yucaipa	33	9000
Idyllwild	33	5900
Angelus Oaks	31	5800
Wrightwood	28	5900
Mt Laguna	20	5900
Palomar Mt Birch Hill	16	5600
Julian	5	4200

Visibility issues with Big Bear snow banks



NEWS

INJURED HIKERS RESCUED AFTER AVALANCHE ON MT. BALDY



Rescue crews hoisted an injured hiker into a helicopter after an avalanche on Mount Baldy.

By ABC7.com staff



Top Precipitation Reports

Location	Precipitation	Elevation
Lytle Creek	12.61	2800
Palomar Observatory	11.36	5560
Harding Canyon Silverado	11.18	4200
Palomar Birch Hill	10.53	5600
Julian	10.47	4200
Silverado Canyon	10.08	2900
Lake Cuyamaca	9.95	4600
Pine Cove	9.91	6300
Descanso	9.19	3700
Mt Woodson	8.83	1720
Whitewater	8.35	2200
Rainbow camp	7.28	1500
Chino Hills	7.05	988
Oso Creek	6.93	20
Campo	6.56	2600

Location	Precipitation	Elevation
Yorba Park	6.10	300
Camp Pendleton Fallbrook	6.07	876
Garden Grove	5.94	80
Escondido	5.93	640
Modjeska	5.91	1260
Temecula	5.91	1180
Norco	5.83	650

Location	Precipitation	Elevation
Rialto	5.55	1400
Valley Center	5.46	1300
Anaheim	5.15	5
Rialto	5.55	1400
Warner Springs	5.09	3000
Ramona	5.07	1420
Chino Airport	5.05	650
Huntington Beach	4.96	20
San Juan Capistrano	4.96	75

Location	Precipitation	Elevation
Fullerton Airport	4.90	96
Poway	4.81	440
Beaumont	4.80	2700
Ontario Airport	4.71	922
Miramar Lake	4.56	130
Rancho Bernardo	4.38	690
Irvine	4.21	70
San Timoteo	4.30	1766
Santee	3.67	300
Perris	3.39	924
Laguna Niguel	3.78	200
Oceanside	3.37	30
San Felipe	3.19	2200

- Burns Canyon
- Palomar Mtn
- Campo
- Otay Mtn
- Volcan Mtn
- Mateo Ridge Camp Pen
- San Miguel
- Lake Mathews
- Border Field SP
- Fremont Canyon
- Jamul and Descanso
- Sierra Peak

99	Elfin Forest and Campo	60
	Lake San Marcos	60
93	Imperial Beach NAS	59
76	Temescal	58
	Barrett Junction	57
75	Oceanside Jetty	56
	Del Mar	55
70	Ramona	55
70	Dana Point	54
	Scripps Pier	54
69	Victorville Airport/Big Bear Airport	53
	Brown Field Airport	53
67	Mission Beach and North Island NAS	52
64	Corona Del Mar	51
	Julian and Mission Trails	51
63	Pine Cove	
	51	
61	San Diego Airport	49
61	Alpine	48
	Santa Ana Airport John Wayne	48
	Oceanside Airport	47
	Ramona Airport	46

Top wind gusts
January 20

Top wind gusts January 22

• Crestline Ridge	60
• Harrison Park	60
• Sierra Peak	60
• Heaps Peak	60
• Hesperia	58
• Fremont Canyon	55
• Pinon Hills	52
• Temescal	47
• Big Bear Airport	47
• North Island	46
• Santiago Peak	46
• Camp Pendleton	44
• Imperial Beach	43
• Carlsbad Airport	41
• John Wayne Airport	41
• Miramar MCAS	41
• Mission Trails	41
• Santa Ysabel	41
• Scripps Ranch	39
• Anza	38
• Carlsbad SDGE	35

January 20, 2017

- 125 tree service call in City of San Diego
- 29 high water rescues in City of San Diego
- San Diego River reaches 12 feet
- Embarcadero many cars left in high water
- City of Chula Vista with over 50 downed trees
- 1.2 million in clean up for Chula Vista

January 20 and 22, 2017

- 2 event total of 300 trees downed in San Diego county
- 5 high water rescues in San Diego county
(2 fatalities) on January 22



Redlands

Rancho Santa Fe



Alex Tardy

Tree falls through home



Dave Summers @DaveSummersNBC7 · 6d
 #Happeningnow Giant Eucalyptus Tree
 downed in Pioneer Park Mission Hills
 #NBC7

2

17

15



PPENING NOW
 IANT TREE BECOMES UPROOTED
 MISSION HILLS
 NBC7SanDiego



*Flooding in Grantville. Photo courtesy
 Brian B. January 20, 2017.*



*Car crushed by downed tree in
 Vista. January 20, 2017.*



Downed tree at UC San Diego late in the morning Friday, January 20, 2017. No injuries were reported.



Cars stranded in a creek in Sorrento Valley. January 20, 2017



Downed tree at UC San Diego late in

Extensive tree damage in San Diego



Laguna Beach



125 tree service
calls in San Diego

Friday media reports



Chula Vista - Friday, January 20

Jim Geering



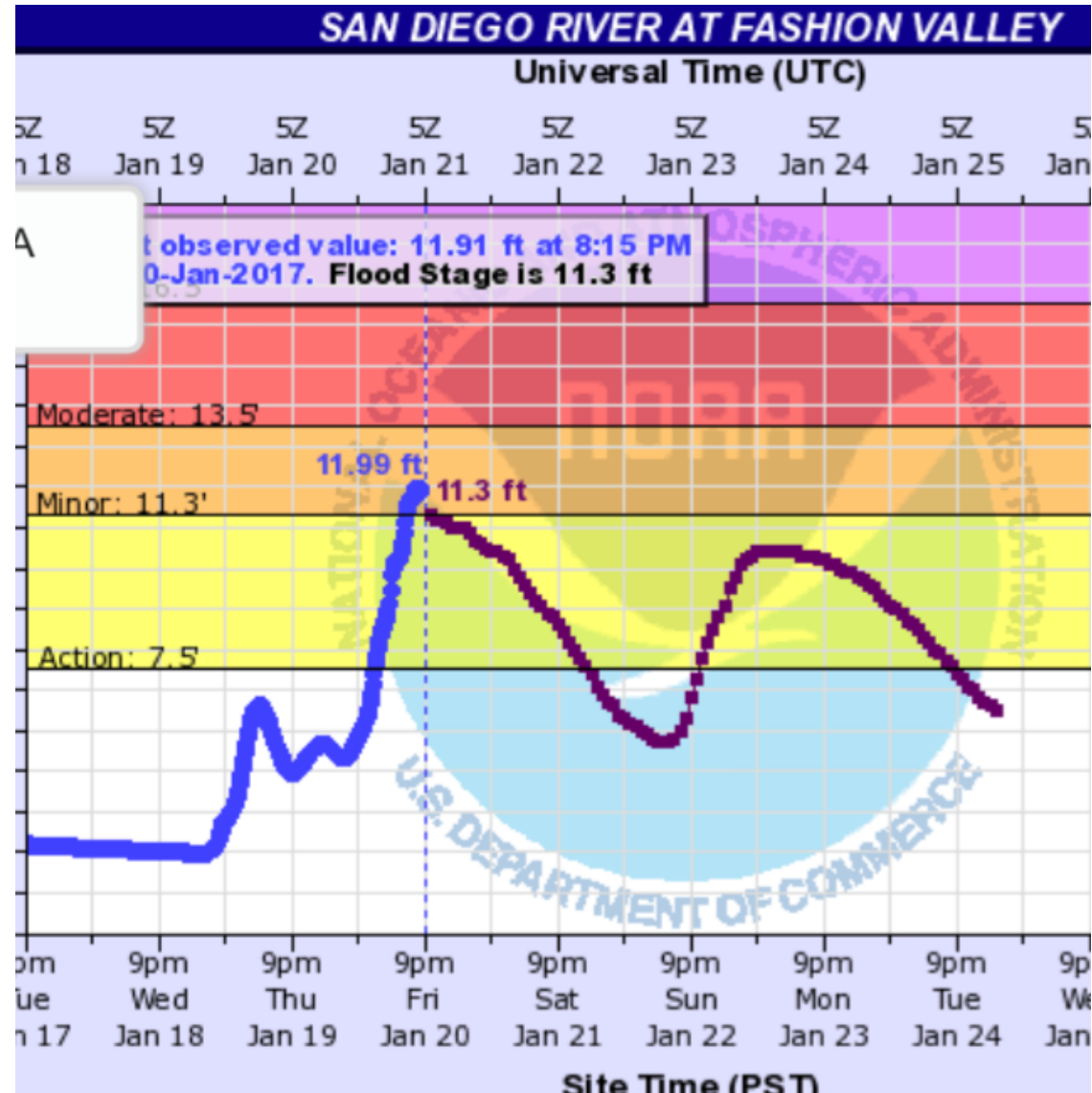
Caltrans Highway 243 and 74



John Hubbs

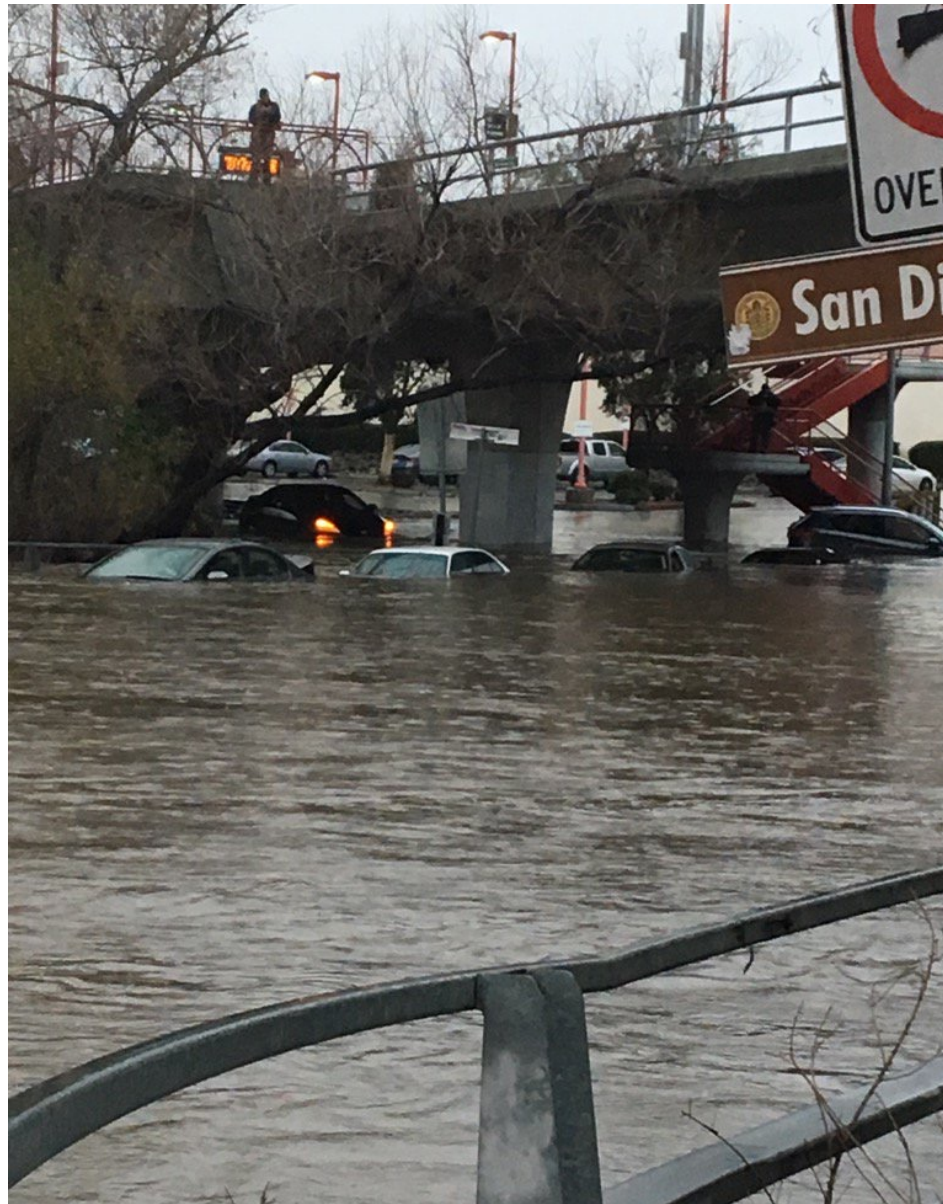


San Diego River at peak January 20, 2017 evening



San Diego River

River reached 12 feet



Riverside high water rescue



https://www.youtube.com/watch?v=Tw_jr9S1fk4

Murrieta CA



LIVE

FIRST ALERT 4

FIRST ALERT FIRST ALERT FIRST ALERT



NEAR SAN BERNARDINO

5:04 51°

FIRST ALERT 4

FIRST ALERT FIRST ALERT FIRST ALERT

CasperNews



WATER RESCUE

5:04 51°

High water rescue Rainbow on January 22



January 23, 2017



Poway – Hilleary Park –
Alex Tardy

High Surf – Big Waves Ocean Beach pier



Newport Beach runoff debris



Resources

<http://droughtmonitor.unl.edu/>

<https://www.climate.gov/>

<http://www.wrcc.dri.edu/anom/>

<http://cdec.water.ca.gov/>

<http://water.weather.gov/precip/>

<http://w2.weather.gov/climate/index.php?wfo=sgx>

<http://www.mwdh2o.com/>

<http://www.sdcwa.org/reservoirs>

<http://www.watersmartsd.org/programs>



Before the storms

THE CW6
NEWS San Diego
10:06 56°

IS THE DROUGHT OVER?

RECENT RAIN HAS HELPED IMPROVE CONDITIONS

Alexander.Tardy@noaa.gov